# Society Proceedings

## THE NEW YORK NEUROLOGICAL SOCIETY

March 3, 1908

The President, Dr. B. Sachs, in the Chair.

## A CASE OF TUMOR OF THE BRAIN

By E. G. Zabriskie, M.D.

The patient was a married woman, forty-five years old, who was first seen with Dr. Post, on July 6, 1907. She gave a history of having had several miscarriages of not more than six weeks duration.

Three years ago, while apparently in excellent health and after a day's washing, she went into the dining-room and was looking over the evening paper when she suddenly became dizzy and felt as though she were going to faint. At the same time she experienced a numbness in the left foot, as though it had gone to sleep. On attempting to stand, the leg gave way under her, and she fell backwards. She was quite positive that she did not lose consciousness, and stated that she was in her right mind throughout the attack, which lasted altogether about three minutes. Her son tried to give her some brandy, but she could not swallow it and by this time felt all right and got up. Since then she had repeated attacks of similar nature. A few months afterwards, the exact date not being quite clear, she had had her first convulsive attack, when she first consulted Dr. Post, early in 1907, she was having them about twice a week. They never lasted more than three minutes. Shortly before their onset she had a constant desire to look backwards, as though someone were behind her and she wanted to "shove them away." The attacks always began with a spasm or twitching of the muscles of the left foot as far as the knee, then extending up the thigh and "heart," and then to the throat, giving her a choking sensation. Recently, she had felt the spasm in the muscles of the left arm as well. She had complained of soreness in that arm, and occasionally dropped objects that she carried in that hand. After these attacks, the leg felt numb, this sensation sometimes persisting for two days after a severe attack.

The motor power of the left leg had been impaired for about a year, and for the past five or six months she had noticed weakness of the corresponding arm. Her eyesight had been growing dim for the past fourteen months, and there was a history of transient attacks of diplopia. Under the use of potassium iodide she had been gaining weight for the past six months, but prior to that she had lost. She felt nauseated at times, but never vomited. There was tinnitus of the right ear. She had no trouble in holding her water, but there was frequent micturition and a slight hesitancy of the stream at times. She said she had been subject to headache all her life, which were vertical in character until the onset of these attacks; since then they had been occipital and bitemporal in character, and consisted of a sensation as though some one were pressing through the head from right to left.

The gait was decidedly limping, indicating a paresis of the left leg. There was no static ataxia. The reflexes were sluggish on both sides; not stronger on the left. There was normal plantar response on the right side; on the left it was difficult to obtain, but when present seemed to be of the Babinski type. The abdominal reflexes were diminished on the left side. There was slight ataxia of the left arm, with some loss of motor power in both the left arm and left leg. There was no qualitative loss of sensation on either side. There was slight spasticity in the left arm. The pupils responded normally to light and accommodation, although they were perhaps slightly sluggish. Ophthalmoscopic records made by Drs. Mittendorf and Skeele indicated a double optic neuritis. There was a slight but positive astereognosis in the left hand, and a well-marked disturbance of position and joint senses in the left arm and leg. Hearing was acute, and equal on both sides. There was no facial paresis.

Dr. John F. Erdmann, who had done the operation in the case shown by Dr. Zabriskie, said that in opening the skull he made rather a large flap, the base of which was three and a half inches in length. Upon turning back the flap, there was no pulsation of the dura, and upon incising this, the tumor was found in the region indicated. It sprang from the falx cerebri, and, contrary to expectations, was readily enucleated with but slight hemorrhage. It weighed four ounces. The woman's convalescence was uneventful, and she left the hospital on the twelfth day. Within four or five days after the removal of the tumor a gradual but marked improvement in the eyesight and in the function of the paralyzed arm was apparent. An interesting feature of the case was the immense thickness of the skull, which the speaker said he had noticed in other cases where he had done the decompression operation.

Dr. Zabriskie said that while the left arm was still somewhat ataxic, the patient had made an almost complete recovery as regards the other sensory disturbances. She was now able to distinguish coins, and the like, perfectly although single objects were occasionally wrongly named, if she were confused or tired. The Babinski sign had disappeared, and there was now no difference in the motor power between the two sides.

Dr. William M. Leszynsky said that Dr. Zabriskie was fortunate in seeing this case before any marked changes had occurred in the motor tract. In a somewhat analogous case that had come under his observation, an endothelial tumor almost as large as the specimen shown in this instance was removed from the brain. The patient made a good recovery and died eight years later from accidental coal-gas poisoning.

Dr. Arthur C. Brush, of Brooklyn, referring to the thickness of the skull in the case operated on by Dr. Erdmann, said he did not think that was a constant factor in these cases. On the contrary, in cortical and subdural tumors he thought rarefaction of the skull was the rule.

## A CASE OF DOUBLE HEMIPLEGIA

By Charles E. Atwood, M.D.

The case was presented to show the Jackson hemiplegic sign after a double hemiplegia, and incidentally to call attention to one or two other points of special interest: *e. g.*, the bulbar type of dysarthria causing the limited facial palsy and retention of emotional reflex as in smiling, and of these attacks; since then they had been occipital and bitemporal in character, and consisted of a sensation as though some one were pressing through the head from right to left.

The gait was decidedly limping, indicating a paresis of the left leg. There was no static ataxia. The reflexes were sluggish on both sides; not stronger on the left. There was normal plantar response on the right side; on the left it was difficult to obtain, but when present seemed to be of the Babinski type. The abdominal reflexes were diminished on the left side. There was slight ataxia of the left arm, with some loss of motor power in both the left arm and left leg. There was no qualitative loss of sensation on either side. There was slight spasticity in the left arm. The pupils responded normally to light and accommodation, although they were perhaps slightly sluggish. Ophthalmoscopic records made by Drs. Mittendorf and Skeele indicated a double optic neuritis. There was a slight but positive astereognosis in the left hand, and a well-marked disturbance of position and joint senses in the left arm and leg. Hearing was acute, and equal on both sides. There was no facial paresis.

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The patient was a married man, 37 years old, a painter, who applied for treatment at the Vanderbilt Clinic on February 28, 1908. He was ambidextrous, working mostly with the left hand, but writing with the right hand. He had a chancre when he was was 18 years old. His wife had had several miscarriages.

In July, 1907, he had his first stroke of apoplexy, affecting the right face, arm, leg and speech. The onset was slow, after severe headache. This first paralysis cleared up gradually.

The second stroke of paralysis occurred on January 28, 1908, six months after the first one. It affected the left face, arm and leg, and was most marked in the arm. Since this second stroke he has had a pseudobulbar type of speech, there being dysarthria and indistinctness of speech, with nasal quality. The lower part of the face only was affected. The patient closed both eyes well, and smiled on both sides. There was greater obliteration of the left labio-facial fold than the right. The examination was conducted with some difficulty, on account of the inability to understand the patient's replies. The reflexes on both sides were increased, left more than right; the skin reflexes were apparently lost. Sensation seemed unimpaired. Oppenheim's sign was not obtained. Babinski's sign was greater on the left than on the right.

The Hughlings Jackson law regarding respiration in hemiplegics held good in this case, despite the fact that there had been a double-sided similarly placed lesion. The intercostal movements on the left or more paralyzed side, during ordinary or automatic respiration, had a greater amplitude than on the sounder side; while in volitional, *i. e.*, cerebrally controlled movements, such as might be induced when the patient was instructed to breathe deeply, the amplitude was greater on the sounder side. It was noted also that the breathing, as would be expected when the cerebral inhibitory control was withdrawn, partook of the Cheyne-Stokes character.

The patient had absolute control of his eyes. The paralysis in the leg was much less than that in the arm. Smell was apparently unaffected. The bladder was not affected. The vocal cords were reddened, thickened and did not quite approximate, but moved equally. The left palatal reflex was greater than the right.

As to whether the second shock increased the old palsy of the opposite side, by affecting the uncrossed pyramidal fibers, Dr. Atwood had been unable to determine. Apparently it did not.

The diagnosis was that of a similarly placed lesion of the two sides, due to a thrombosis of the lenticulo-striate artery, occurring first on the left side and then on the right. A point of great interest is the location of vascular atheroma so symmetrically placed.

## UNUSUAL EFFECTS OF AN INJURY OF THE SPINE

By Pearce Bailey, M.D.

The patient was a young man, who, eighteen months ago, was struck in the back by a heavy ice-hook used in loading ice. The instrument was shaped something like a boat-hook, and the injury it inflicted was in the region of the second lumbar vertebra. There was an immediate loss of power in the left leg, and ten minutes later the right leg, which was now the worse of the two, became similarly affected. On the left side there the effects of a similarly placed bilateral lesion, from a symmetrical atheroma.

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The symptoms in this case were suggestive of the Brown-Séquard distribution, although not typically so. Both knee jerks were absent. The disturbance was confined chiefly to the upper sacral segments, and the lesion was probably destructive in character. Retained sexual power, with paralyzed sphincters, was the striking feature.

Dr. Charles L. Dana did not think this patient's condition could be improved by a surgical operation.

Dr. Smith Ely Jelliffe said that if any operation were undertaken, especially with the view of restoring the functions of the bladder and rectum, it might be well to consider the work of Dr. Kilvington, of Melbourne, in connection with the intra-spinal bridging of nerve trunks in the lumbar region, nerve crossing as he has termed it (*British Medical Journal*, April 27, 1907, p. 988).

Dr. L. Pierce Clark said that while the operations that had thus far been undertaken for the betterment of these conditions were still largely theoretical, it was possible that their practical value would be demonstrated in the near future. Two of these operations had already been undertaken under his direction, the results of which were too early to report upon. The operation consisted in anastomosing the extra-dural nerve root from one spinal segment above the break to another below the break by splitting the nerve and then splicing one half of it to a similar section taken from the nerve below, in this way endeavoring to effect a plexus or a cabling to bridge over or around the gap. The same thing had been done by Kilvington in Melbourne, Australia, but he, instead of splitting the nerve, utilized the entire nerve trunk. The operation is not difficult and requires little special skill aside from that used in ordinary operations of peripheral nerve anastomosis elsewhere in the body.

## A PATHOLOGICAL REPORT ON MYASTHENIA GRAVIS

By Fred. S. Mandlebaum, M.D., and Herbert L. Celler, M.D.

(By invitation)

In this paper the authors reported a case of myasthenia gravis that had come under their observation, with a detailed pathological report. The conclusions presented were as follows:

1. Neoplasms of thymic origin had been noted too frequently in myasthenia gravis to be ignored as a possible etiological factor in a certain proportion of the cases. In the cases reported by the authors, an unusual type of tumor, hitherto undescribed in this disease, was present.
2. While definite proof was still lacking, it seemed most probable that the disease was the manifestation of a toxemia of indeterminate origin.
3. The action of the toxic agent was not confined to the muscular system, but the organism was generally affected, as evidenced by the widespread presence of lymphocytic infiltrations throughout the body.
4. Although no degenerative changes were demonstrable in either brain or cord, the occurrence of lymphocytic infiltrations in the medulla, observed for the first time in the case reported, indicated the involvement of the central nervous system in the general toxemia.